

I. Introduction

Applicant thanks the Examiner for the indication of allowable subject matter in claims 5 to 7, 15 to 17, 20, 22, 24 and 25. Claim 1 has been amended so that it now incorporates the subject matter of cancelled claim 3 and part of the subject matter of amended claim 2. Claim 5 has been rewritten as a dependent claim which includes all of the limitations of former base claim 1 and original intervening claims 3 and 4. Accordingly, rewritten claim 5 should be in condition for allowance at this time along with claims 6 and 7 which depend on claim 5.

Claim 11 has been amended in order to incorporate the subject matter of former claim 12 which has now been cancelled. Also, former claim 13 has been rewritten as an independent claim which includes all of the subject matter of original claim 11.

Claim 19 has been amended to incorporate the subject matter of original claim 20 and accordingly it is submitted that claim 19 is now in condition for allowance. Also, former dependent claim 21 has been rewritten as an independent claim which includes not only the subject matter of original claim 19 but also the subject matter of original claim 22 which has now been cancelled. Since the subject matter of claim 22 was indicated as allowable, amended claim 21 should now be in condition for allowance by the Examiner.

Minor amendments have been made to claim 25 which depends indirectly on claim 19 so as not to recite redundant subject matter. The spelling error in claim 27, line 2, has been corrected as requested by the Examiner.

Former method claims 28 to 38 are now indicated as "withdrawn". Applicant hereby affirms its election of the claims of group I, namely claims 1 to 27.

II. Amendment to the Specification

The abstract has been amended in the manner requested by the Examiner and it no longer exceeds 150 words. It is submitted that the abstract has been written with appropriate language and is quite clear and easily understood by a reader.

With respect to the objection to the phrase "As shown in Figure 1", which appeared near the end of paragraph 40 of the disclosure, this phrase has now been changed in the manner requested by the Examiner so that it now refers to "Figure 1B".

III. Rejection of Claims 1 to 4 and 8 to 10 under 35 USC Section 102(b)

Claims 1 to 4 and 8 to 10 stand rejected under 35 USC 102(b) as unpatentable in view of the teachings of Kneip '838. It is respectfully submitted that amended claim 1 clearly and patentably distinguishes over the teachings of this reference, which is directed to a drilling machine mounted on a movable base frame 1 connected to two uprights or posts 5, 6 which are connected together at the top by a single crossbeam 8. Located between the crossbeam 8 are two parallel pipes 9 and 10 on which three drilling assemblies including two movable drilling assemblies 11, 12 are mounted. These two drilling assemblies are movable in the lengthwise direction of the apparatus and are not movable in the widthwise direction. A cable arrangement 18 is provided for coordinating the movement of the two drilling assemblies so that they both move at the same time towards or away from the central drilling assembly 21 which is fixably mounted in the middle (see column 2 at lines 35 to 54).

Below the pipe 10 there is a support bar 28 for supporting a blind or sash frame. Further down on the assembly, there is an additional locating rail 34 which extends between the uprights, 5, 6 and several drilling heads can be located between the upper rail 28 and the lower rail 34.

It will be particularly noted that the upper rail 28 extends the full length of this drilling machine as illustrated in Figure 28. Because of this, it is by no means clear from either the drawings or the text that this drilling machine is capable of

carrying out machining operations "on two rectangular frameworks arranged one above the other and extending horizontally" as now clearly required by claim 1. It appears that in fact this machine is intended to drill only straight, elongate frame members intended for use in a window or sash and not rectangular frameworks.

It will also be seen from the above review that the '838 patent fails to disclose the following features recited now in claim 1:

- (1) two horizontally extending guide arrangements mounted one above the other on each horizontal support frame of a framework guide supporting device, these guide arrangements being adapted to guide and support respectively two rectangular frameworks for intermittent horizontal movement relative to said machine in the lengthwise direction of the base frame (In the reference, the only guide arrangements which are mounted one above the other are upper locating rail 28 and bottom locating rail 34 and these are not provided in duplicate nor do they appear to be provided for intermittent horizontal movement of rectangular frameworks in the lengthwise direction – the rails 28 and 34 appear to be used simply to provide an underlying support for a window frame member placed thereon); and
- (2) a tool supporting mechanism including a horizontal support beam mounted for sliding movement on the base frame in the widthwise direction of the base frame (in the reference, the drilling assemblies are simply mounted on the parallel pipes 9, 10 which are fixably attached to the upright posts 5,6 and are not movable relative to the base).

With respect to the specific comments of the Examiner in paragraph 9 of the Office Action, it should be noted that the elongate support frames, 9, 10 are not mounted "for sliding movement on said base frame in a widthwise direction" as now clearly required by claim 1 and these frame members are in fact fixably mounted on the base frame.

#### IV. Rejection of Claims 11 to 14 and 18 under 35 USC 102(b)

Claims 11 to 14 and 18 stand rejected under 35 USC 102(b) as unpatentable over the teachings of Daugherty '393 which is directed to a high speed milling machine capable of carrying out machining operations on a workpiece W. This machine admittedly includes a fixed base 58 on which a sliding base 59 is mounted for horizontal movement in the longitudinal direction.

The sliding base supports a swivel base 61 which can be moved along an arcuate path on the top of this base. Rigidly fixed on top of the swivel base is a column 64 (referred to by the Examiner as a support post) which serves as a support for a so-called vertical saddle 66 which is mounted for vertical sliding movement on the column. This saddle carries a vertical swivel saddle 68 which the Examiner identifies as a base unit. A head stock comprising an electric motor 70 and a spindle 71 are mounted on the swivel saddle and the spindle supports a cutter 72.

It will be seen from this review that amended claim 11 distinguishes over the teachings of this reference by reciting the following features:

- (1) a drive motor mechanism adapted for moving said base unit on said main mounting plate, this mechanism including a fourth motor mounted on said base unit, the latter aspect being set out at the end of the claim (in the reference, the Examiner identifies the base unit as simply the swivel saddle 68 which is pivotally mounted on the vertical saddle 66 but which has no motor mounted thereon in order to move same – it is indicated at the bottom of column 7 and the top of column 8 of the text that vertical swiveling movement is imparted to the saddle by means of an electric motor 214 located in the top portion of the column).
- (2) a support arm pivotal about a transverse axis that is substantially perpendicular to the central longitudinal axis about which the support post rotates (the Examiner relies upon the swivel saddle 68 as constituting a support arm but it is submitted that this saddle is not an arm within the normal meaning of this term).
- (3) the support arm must be mounted on a second end of the support post (in the reference, the swivel saddle 68 which the Examiner calls a support arm appears to be mounted in a central section of the column).

In view of these differences, reconsideration and allowance of amended claim 11 is requested along with the allowance of claim 18 which depends upon claim 11.

Original claim 13 has been rewritten as an independent claim and it is respectfully submitted that this claim does patentably distinguish over the teachings of the Daugherty '393 patent. It will be particularly noted that claim 13 requires that the first drive unit motor be "mounted substantially in a lower section of the hollow tube". The first drive motor unit is the motor unit used to rotate the support post about a central longitudinal axis of the post. Contrary to the assertion by the Examiner in paragraph 10 of the Office Action, the '393 patent

does not in fact show a drive motor which is adapted to rotate the column 64 about its longitudinal vertical axis and which is mounted substantially in a lower section of the hollow tube. The Figure 5 to which the Examiner refers is only a plan view of the sliding base of the machine on which the column 64 is mounted. The motor 100 shown on the right side of Figure 5 is the motor used to move the sliding base 59 relative to the fixed base 58 and clearly this motor is not located inside of the rotatable column. The drive motor for rotating the swivel base on which the column is mounted is the motor 141 shown on the left side of Figure 1 which is connected to a gear box 142 fixed to the sliding base. It is clearly indicated at the top of column 6 of the text that this motor is coupled to a drive shaft 151 which turns a worm 152 which in turn drives a wormwheel 155. Clearly the operation of the motor 141 will result in rotation of the swivel base 61 about the pivot shaft 135 shown on the left side of Figure 8. It will be evident from this review therefore that the first drive motor unit for rotating the support post is not substantially in a lower section of the hollow tube that forms the support post as required by claim 13.

In addition to the aforementioned distinguishing feature, the applicant's note that claim 13 has also been amended to specifically require in the preamble that the apparatus is "for carrying out machining operations on rectangular frameworks" and there is no indication or suggestion in the '393 patent that the milling machine is designed for or adapted for a machining operation of this type. Furthermore, it is respectfully submitted that the following features recited in claim 13 are not taught in or suggested by the '393 patent:

- (a) a vertical main mounting plate on which said base unit is movably mounted (in the cited reference, the base unit 68 is mounted on horizontal plates including the swivel base 61 and the sliding base 59);
- (b) a support arm pivotal about a transverse axis substantially perpendicular to the central longitudinal axis of the support post (as indicated above, the vertical swivel saddle 68 cannot properly be considered a support arm within the normal meaning of this term); and

- (c) the support arm must be mounted on a second end of the support post which is opposite the one end where the post is mounted on the base unit (as indicated, the swivel saddle 68 relied upon by the Examiner appears to be mounted in a central section of the column 64).

In view of these differences, it is respectfully submitted that amended claim 13 has the required novelty and is also in condition for allowance.

Rejected claim 14 depends upon claim 13 and this claim distinguishes over the cited reference for the same reasons as claim 13.

Turning now to the rejection of claim 19 on the grounds that it lacks novelty in view of the teachings of the '393 patent, it will be seen that claim 19 has been amended to include the subject matter of former claim 20, a dependent claim considered allowable by the Examiner. Thus, claim 19 now requires that the third support structure include "a vertically extending main mounting plate on which said second support structure is vertically movable" and the claim also requires a further drive motor system for moving the second support structure vertically on said main mounting plate with the further drive motor being mounted on the second support structure. In light of these distinguishing features, it is submitted that claim 19 is now in condition for allowance, together with claims 23 to 27 which depend directly or indirectly on claim 19.

Former dependent claim 21 has been rewritten as an independent claim which includes all of the subject matter of original claim 19, plus the subject matter of original claim 22 which has now been cancelled. As the Examiner indicated that the subject matter of claim 22 was allowable, it is submitted that the claim 21 is also clearly in condition for allowance.

Finally, with respect to the rejection of original claim 23 on the grounds of anticipation in view of the '393 patent, this claim is dependent upon claim 19 which has been amended to include the patentable subject matter of original claim 20. Accordingly, claim 23 is believed to be in condition for allowance for the same reasons as claim 19.

In view of the above submissions, reconsideration and allowance of this application are respectfully requested. If the Examiner has any further questions

or concerns, the Examiner is invited to contact the applicants' undersigned attorney.

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